IN THE SPECIFICATION

Please amend the paragraph at page 3, lines 10-22, as follows:

Final solution would be to increase m, the number of binary data per symbol, that would result in the use of complex modulations called higher order modulation. Remember that two of these modulations are called the PSK or "Phase Shift Keying" modulation which is a phase 15 modulation (or coding) and the MOK (M-ary Orthogonal Keying) modulation of order M. A description is given in <u>references 1 and 2</u> ~~the following two general books:~~

~~-Andrew J. VITERBI: "CDMA – Principles of Spread Spectrum Communication" Addison-Wesley wireless Communications Series, 1975,~~

~~-John G. PROAKIS: "Digital Communications" McGraw-Hill International Editions, 3rd edition, 1995.~~

Please amend the paragraph at page 9, lines 5-11, as follows:

Information about RAKE type architectures using a coherent modulation can be found in <u>reference [3]</u> ~~the article entitled "ASIC Implementation of a Direct-Sequence Spread-Spectrum RAKE-Receiver" by Stephen D. LINGWOOD, Hans KAUFMANN, Bruno HALLER, published in IEEE Vehicular Technology Conference VTC'94, Stockholm, June 1994, pp 1-5.~~

Please amend the paragraph at page 10, lines 20-25, as follows:

A simple integrator ~~like the integrator 24 in figure 1 integrated in circuit 90 in figure 2~~ will integrate all signals present, in other words the peaks (corresponding to true information) and the noise (not corresponding to any information). Therefore the signal to noise is low.

Please amend the paragraph at page 10, lines 26 to page 11, line 5, as follows:

Reference [4] (French patent FR-A-2 752 330) deposited by the Applicant of this patent describes a means of overcoming this disadvantage. The signal obtained using the sum of the squares of the Dot(k) and the 30 Cross(k) signals, and then extracting the square root of this sum, directly reflects the energy distribution of the different propagation paths, the amplitude of each peak being the energy transported by the corresponding path. Therefore, according to this document, the first step is to measure a quantity E(k) defined as follows:

$$E(k) = [Dot(k)^2 + Cross(k)^2]^{1/2}$$

Please amend the paragraph at page 13, lines 1-7, as follows:

Although this multiple path combination technique recommended in ~~document 2 757 330~~ reference [4] really does result in the stated advantages, these advantages are related to the differential modulation DP but they do not take advantage of the MOK modulation described above. The purpose of this invention is to combine these various techniques to combine their advantages.

Please amend the paragraph at page 14, line 25 to page 15, line 5, as follows:

It should be noted that ~~document US-A-5 692 007~~ reference [5] already described a receiver making use of combined phase differential (DP) and multiple orthogonal signals (MOK) modulations. But the receiver described is a simplified version of a coherent receiver in which the phase is estimated for each symbol using a table and in which the differential demodulation is done by subtracting the phase of two consecutive symbols. Therefore it is not a non-coherent reception like this invention. Furthermore, this document does not take account of multiple propagation paths using a RAKE structure.

Please insert the following after page 19, as a new page:

<u>REFERENCES</u>

[1] "CMDA-Principles of Spread Spectrum Communication", Andrew J. VITERBI,

Addison-Wesley Wireless Communication Series, 1975;

[2] "Digital Communications" John G. PROAKIS? McGraw-Hill International

Editions, 3rd Edition, 1995;

[3] "ASIC Implementation of a Direct-Sequence Spread-Spectrum RAKE-Receiver",

Stephen D. LINGWOOD, Hans KAUFMANN, Bruno Haller, IEEE Vehicular Technology

Conference VTC'94, Stockholm, June 1994, pp 1-5;

[4] French patent FR-A-2 752 330; and

[5] US Patent US-A-5 692 007.

Please amend the Heading on page 20, line 1, as follows:

<u>~~CLAIMS~~ WE CLAIM</u>

Please amend the Abstract as shown on the following page: